

DESCRIPTION

Under this item, the CONTRACTOR shall furnish and install a steel traffic signal pole.

MATERIAL

The steel poles herein specified are to be used for suspending traffic signal heads and luminaires.

Poles shall be the anchor base type and shall be either round or multi-sided continuously tapered construction 12 mm per meter of length, made of ASTM-A59A, 379,225 kPA steel.

The pole shall have a steel base electrically welded to the butt end of the pole. The anchor base shall telescope the butt end of the pole shaft and shall be continuously welded on the inside bottom and outside top. The pole shaft shall be 1 ply, 0-gauge steel with a butt diameter of 457 mm with a 654 mm bolt circle. The entire structure shall be hot dip galvanized in accordance with ASTM A123. The pole shall be of one piece having no transverse joints or welds and no more than one longitudinal seam which shall be continuously welded and ground or roller flush. Pole shall be of uniform cross section.

The pole diameter shall be uniform at any cross section and the pole shall be straight. The poles shall be furnished with galvanized cast iron or aluminum removable pole caps and anchor bolt covers. Galvanizing shall be in accordance with ASTM A123. Anchor bolt covers shall be attached to the base and pole by hex head bolts.

Poles shall be furnished with a cast aluminum 10 mm diameter "J" hook bolted to the inside top of the pole or a 10 mm diameter galvanized steel "J" hook welded inside the top of the pole. A grounding nut having 13 mm #13 tapped hole shall be located on the inside of the shaft above the handhole. The poles shall have a 102 mm X 203 mm reinforced handhole frame and removable cover located 305 mm to 381 mm from the butt end of the pole.

Poles shall be furnished with 4 – 51 mm diameter X 2286 mm, ASTM-A697 min. yield 620,550 kPA anchor bolts. Each rod shall be threaded 228 mm minimum one end, and supplied with galvanized hexagon nuts, washers and lock nuts. Anchor bolts shall be threaded 228 mm and be provided with a 102 mm X 102 mm X 25 mm square steel nut at the base end. Nuts, washers and the top 305 mm of the anchor bolts shall be hot dip galvanized. The pole shall have a cable inlet welded to the pole, positioned as indicated on the plans. The cable inlet will be of a size to take a 76 mm weatherhead. A 76 mm weatherhead will also be provided with the pole. The pole shall be fitted with a simplex fitting (two bolt type) as shown on the plans or as directed by the ENGINEER. All welding shall be in accordance with the New York State Steel Construction Manual. The base plate for the pole shall be made from 64 mm plate and will be 680 mm square.

Poles, bases, anchor bolts, nuts, washers, connection devices and pole caps and anchor bolt covers shall be fabricated from material conforming to NYSDOT Standard Specifications, Section 724-03, latest revision..

**ITEM 686.9944M STEEL POLE, "0" GAUGE, 9.8m LONG WITH SIMPLEX FITTINGS
(ANCHOR BASE) - TYPE III-4500 Kg**

BASIS OF ACCEPTANCE

Acceptance of poles covered by this specification will be based on manufacturer's certification of compliance with the specification requirements signed by an officer of the company. Detailed drawings of the poles shall be submitted with the certifications.

CONSTRUCTION DETAILS

Pole erection shall include installation and attachment of fittings as specified on the plans and detail sheets as follows:

- (a) Anchor bolt covers
- (b) Weatherheads and couplings as required.
- (c) Service bracket
- (d) Pole cap
- (e) Cabinet mounting fittings, plates, brackets as needed for the cabinet being installed, if required.
- (f) Reinforced couplings for wire entrances to cabinets.
- (g) Galvanized eyebolts, nuts and washers for attaching span wire assembly.
- (h) Galvanized pole clamps with eyes for attaching tether wires.
- (i) Field galvanizing shall be done in accordance with NYSDOT Standard Specifications, Section 719-01, latest revision..

METHOD OF MEASUREMENT

The poles will be measured for payment as the number of each unit furnished and installed in accordance with the contract documents or as directed by the ENGINEER.

BASIS OF PAYMENT

The unit price bid for each pole shall include all the items specified in the construction details and the necessary grounding system and anchor bolts.

Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
686.9944M	Steel Pole, "0" Gauge, 9.8m Long With Simplex Fittings (Anchor Base) Type III - 4500 kg	EA